

PESHKIN ET AL. -- 09/781,801
Client/Matter: 007448-0303801

IN THE CLAIMS:

This list of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) An intelligent trolley module for use in an intelligent assist system, the intelligent trolley module comprising:
 - a plurality of wheels on the intelligent trolley module and configured to move the trolley module along an overhead track;
 - an actuator on the intelligent trolley module for driving at least one of the wheels in a horizontal direction;
 - a computational node on the intelligent trolley module for controlling the actuator;
 - and
 - a communication interface on the intelligent trolley module for interfacing with an information network and for providing input/output digital communication between the computational node on the intelligent trolley module, and at least one computational node on at least one other module within the intelligent assist system via a common data link.
2. (Previously Presented) The intelligent trolley of claim 1 wherein the actuator comprises a gearing.
3. (Previously Presented) The intelligent trolley of claim 1 wherein the actuator comprises a motor.
4. (Previously Presented) The intelligent trolley of claim 1 wherein the computational node implements a virtual limit controlling motion of the trolley.
- Claim 5 (Canceled).
6. (Original) The intelligent trolley of claim 1 further comprising a roller.
7. (Original) The intelligent trolley of claim 1 further comprising a manually operable roller release.

PESHKIN ET AL. -- 09/781,801
Client/Matter: 007448-0303801

8. (Original) The intelligent trolley of claim 1 further comprising an automatic roller release.
9. (Original) The intelligent trolley of claim 1 further comprising a position indicator for indexing motion of the device.
10. (Previously Presented) The intelligent trolley of claim 9 wherein the position indicator comprises a hall switch.
11. (Previously Presented) The intelligent trolley of claim 1 wherein the computational node uses odometry for monitoring the motion of the trolley.
12. (Currently Amended) An intelligent lift module for use in an intelligent assist device- system, the intelligent lift module comprising:
 - an actuator on the intelligent lift module;
 - a support connected to the actuator and configured to move a payload in a substantially vertical direction;
 - a computational node on the intelligent lift module in communication with the actuator for controlling movement of the payload; and
 - a communication interface on the intelligent lift module for interfacing with an information network and for providing input/output digital communication between the computational node on the intelligent lift module, and at least one computational node on at least one other module within the intelligent assist system via a common data link.
13. (Previously Presented) The intelligent lift module of claim 12 wherein the support comprises a cable.
14. (Previously Presented) The intelligent lift module of claim 12 wherein the cable is raised and lowered by a reel.
15. (Previously Presented) The intelligent lift module of claim 14 wherein the reel comprises a translating reel.

PESHKIN ET AL. -- 09/781,801
Client/Matter: 007448-0303801

16. (Previously Presented) The intelligent lift module of claim 15 wherein the reel comprises a slidable translating reel.

17. (Previously Presented) The intelligent lift module of claim 15 wherein the reel further comprises a cam follower.

18. (Original) The intelligent lift module of claim 12 further comprising a replaceable guide unit containing a cam follower.

19. (Original) The intelligent lift module of claim 12 further comprising a position indicator.

20. (Original) The intelligent lift module of claim 18 further comprising a hall switch.

21. (Original) The intelligent lift module of claim 18 further comprising a motor encoder.

22. (Previously Presented) The intelligent lift module of claim 18 wherein the reel comprises a plurality of hall switches configured to index multiple rotations of the reel.

23. (Previously Presented) The intelligent lift module of claim 12 further comprising a virtual limit to the lift.

24. (Currently Amended) An input device for use in an intelligent assist system, the input device comprising:

a handle for gripping; and

at least one proportional control;

wherein the input device is in communication with a computational node disposed on a multi-function hub, wherein the proportional control when moved provides a proportional output signal to the computational node, wherein the computational node on the multi-function hub passes the output signal to at least one computational node on at least one other

PESHKIN ET AL. -- 09/781,801
Client/Matter: 007448-0303801

module within the intelligent assist system via a common data link, and where in the multi-function hub interfaces with an information network.

25. (Original) The input device of claim 24 wherein the input device comprises a pendant.

26. (Previously Presented) The input device of claim 24, wherein the output signal comprises one of an up signal to lift a payload up and a down signal to lower the payload down.

27. (Previously Presented) The input device of claim 24, wherein the proportional control comprises a shaft to rotate a magnet in the vicinity of a hall effect sensor to create the output signal.

28. (Previously Presented) The input device of claim 24, further comprising a plurality of buttons configured to be assigned specific functions.

29. (Original) The input device of claim 28 wherein the specific functions comprise stop and reset.

30. (Previously Presented) The intelligent trolley of claim 1, wherein the common data link is a bus.

31. (Previously Presented) The intelligent trolley of claim 1, wherein the common data link is a wireless data link.

32. (Previously Presented) The intelligent lift module of claim 12, wherein the common data link is a bus.

33. (Previously Presented) The intelligent lift module of claim 12, wherein the common data link is a wireless data link.

PESHKIN ET AL. -- 09/781,801
Client/Matter: 007448-0303801

34. (Previously Presented) The input device of claim 24, wherein the common data link is a bus.

35. (Previously Presented) The input device of claim 24, wherein the common data link is a wireless data link.

36. (Previously Presented) The intelligent trolley of claim 1, wherein the at least one other module comprises a lift.

37. (Previously Presented) The intelligent trolley of claim 1, wherein the at least one other module comprises a multi-function hub.

38. (Previously Presented) The intelligent lift module of claim 12, wherein the at least one other module comprises a trolley.

39. (Previously Presented) The intelligent lift module of claim 12, wherein the at least one other module comprises a multi-function hub.

40. (Previously Presented) The input device of claim 24, wherein the at least one other module comprises a trolley.

41. (Previously Presented) The input device of claim 24, wherein the at least one other module comprises a lift.